

CLAIMS:

What is claimed is:

1. A method of making a disposable pant having an inward fin crotch seam, comprising:

5 providing first and second panels, each panel having an inner surface, an outer surface, a panel waist edge, a panel leg edge, and two side regions;

positioning the panels such that their respective outer surfaces are in a facing relationship;

bonding the panels together to form a crotch seam;

10 repositioning the panels such that the inner surfaces are in a facing relationship; and

bonding the side regions of the first panel to the side regions of the second panel to create two side seams to define a waist opening and two leg openings.

15 2. The method of claim 1 wherein the first panel is a different size than the second panel.

3. The method of claim 1 wherein the crotch seam intersects the panel leg edge of at least one panel.

20

4. The method of claim 1 wherein the crotch seam intersects the panel leg edges of both panels.

25 5. The method of claim 1 wherein the crotch seam does not intersect either panel leg edge.

6. The method of claim 1 wherein the panel leg edges coincide to define a pant leg edge.

7. The method of claim 6 wherein the crotch seam follows a path that begins at the first panel leg edge, extends toward the first panel waist edge, and terminates at the first panel leg edge.

8. The method of claim 7 wherein the path is arcuate.

9. The method of claim 7 wherein at least a portion of the path is straight.

10. The method of claim 1 wherein the crotch seam is a fin seam.

11. The method of claim 1 wherein the side seams are fin seams.

12. The method of claim 11 wherein the pant has two side edges, and at least a portion of the first panel remains unbonded to the second panel between an outer edge of at least one side seam and the nearest side edge.

13. The method of claim 1 wherein each side seam extends less than the entire distance from the waist opening to the nearest leg opening.

14. A method of making a disposable pant having an inward fin crotch seam, comprising:

providing first and second panels, each panel having an inner surface, an outer surface, a panel waist edge, a panel leg edge, and two side regions;

5 positioning the panels such that their respective outer surfaces are in a facing relationship;

bonding the panels together remote from the panel leg edges to form an inset crotch seam;

10 removing sections of the panels between the inset crotch seam and the panel leg edges to define an outer crotch edge;

repositioning the panels such that the inner surfaces are in a facing relationship; and

15 bonding the side regions of the first panel to the side regions of the second panel to create two side seams to define a waist opening and two leg openings.

15. The method of claim 14 wherein the outer crotch edge is arcuate.

16. The method of claim 14 wherein the first panel remains unbonded to the second panel in at least a portion of an area between the inset crotch seam and the
20 outer crotch edge.

17. The method of claim 14 wherein the inset crotch seam does not intersect either panel leg edge.

18. A method of making a disposable pant having an inward crotch seam, comprising:

providing first and second panels, each panel having an inner surface, an outer surface, a panel waist edge, a panel leg edge, and two side regions;

5 positioning the panels such that their respective outer surfaces are in a facing relationship;

bonding the panels together to form a crotch seam having a crotch seam edge;

cutting at least one slit in the crotch seam to define at least two crotch seam sections, each section having a crotch seam section edge;

10 repositioning the panels such that the inner surfaces are in a facing relationship; and

bonding the side regions of the first panel to the side regions of the second panel to create two side seams to define a waist opening and two leg openings.

15 19. The method of claim 18 having at least five slits.

20. The method of claim 18 wherein the cutting step includes cutting notches in the crotch seam.

20 21. The method of claim 20 wherein at least a part of each crotch seam section edge is arcuate.

22. The method of claim 18 wherein each slit is generally perpendicular to the crotch seam edge.

25

23. The method of claim 18 wherein each slit passes completely through each panel.

24. A method of making disposable pants having inward crotch seams, comprising:

providing first and second webs, each web having a longitudinal direction, a transverse direction, an inner surface, an outer surface, a web waist edge generally aligned with the longitudinal direction, and a web leg edge generally aligned with the longitudinal direction;

positioning the webs such that their respective outer surfaces are in a facing relationship;

bonding the webs together at a plurality of locations in the longitudinal direction to define a plurality of crotch seams, creating an inside-out composite pant web;

repositioning the webs such that the inner surfaces are in a facing relationship, creating an outside-out composite pant web having a plurality of inward fin crotch seams spaced apart in the longitudinal direction;

bonding the webs together at a plurality of locations in the longitudinal direction to define a plurality of web side seams, each web side seam positioned longitudinally between a pair of crotch seams; and

cutting the outside-out composite pant web into a plurality of disposable pants, each pant having a waist opening, two leg openings, two pant side seams, and an inward fin crotch seam.

25. The method of claim 24 wherein each web has a transverse width, and the first and second webs are unequal in width.

26. The method of claim 25 wherein the first and second webs are positioned such that their respective web waist edges coincide.

27. The method of claim 24 wherein bonding the webs together to define a plurality of web side seams comprises bonding two web side seams longitudinally between each pair of crotch seams, the first web remaining substantially unbonded to the second web in an area longitudinally between the two web side seams, and wherein the outside-out composite pant web is cut into a plurality of disposable pants along a cut line in the unbonded area.

28. The method of claim 24 wherein the crotch seam is an inset crotch seam, and the method further comprises removing sections of the first and second webs between each inset crotch seam and the web leg edges.

29. The method of claim 24 further comprising cutting at least one slit in each crotch seam.

30. The method of claim 29 wherein each slit passes completely through each of the first and second webs.

31. The method of claim 24 further comprising cutting at least one notch in each crotch seam.

32. A disposable pant having a waist opening, two leg openings and two side regions, the pant comprising:

front and back panels;

two side seams joining the front and back panels; and

5 an inward fin crotch seam joining the front and back panels.

33. The disposable pant of claim 32 wherein the inward crotch seam includes at least one slit.

10 34. The disposable pant of claim 32 wherein the inward crotch seam includes at least five slits.

35. The disposable pant of claim 32 wherein the inward crotch seam includes at least one notch.

15 36. The disposable pant of claim 32 wherein the crotch seam follows a path that begins at one leg opening, extends toward the waist opening, and terminates at the other leg opening.

20 37. The disposable pant of claim 36 wherein the path is arcuate.

38. The disposable pant of claim 32 comprising an absorbent.

39. The disposable pant of claim 38 wherein the absorbent comprises a front absorbent piece attached to the front panel and a back absorbent piece attached to the back panel, wherein the front and back absorbent pieces are not attached to each other.

5

40. The disposable pant of claim 39 where the front and back absorbent pieces contact each other near the inward fin crotch seam.

41. The disposable pant of claim 39 wherein the front and back absorbent pieces are contained within the respective front and back panels.

10

42. The disposable pant of claim 39 wherein the inward fin crotch seam has a height, and at least one of the front and back absorbent pieces has a thickness at an end that is closest to the inward fin crotch seam that is greater than the inward fin crotch seam height.

15

43. The disposable pant of claim 32 wherein the front and back panels each comprise an absorbent panel sandwiched between an outer cover and a liner.